

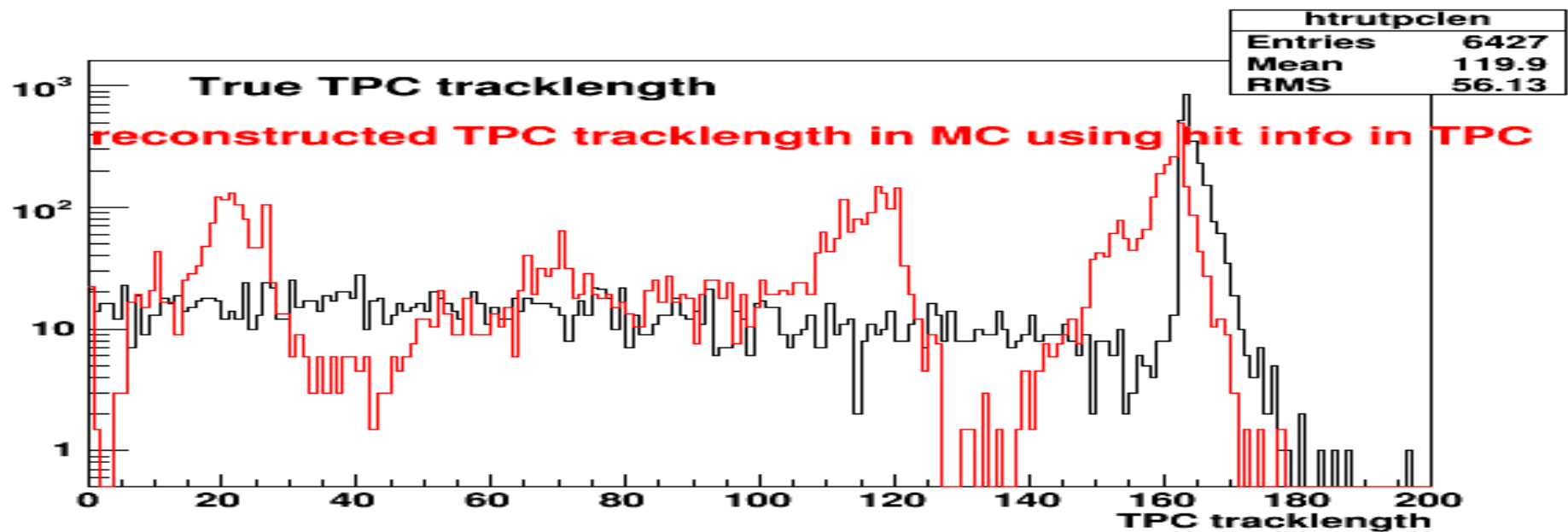
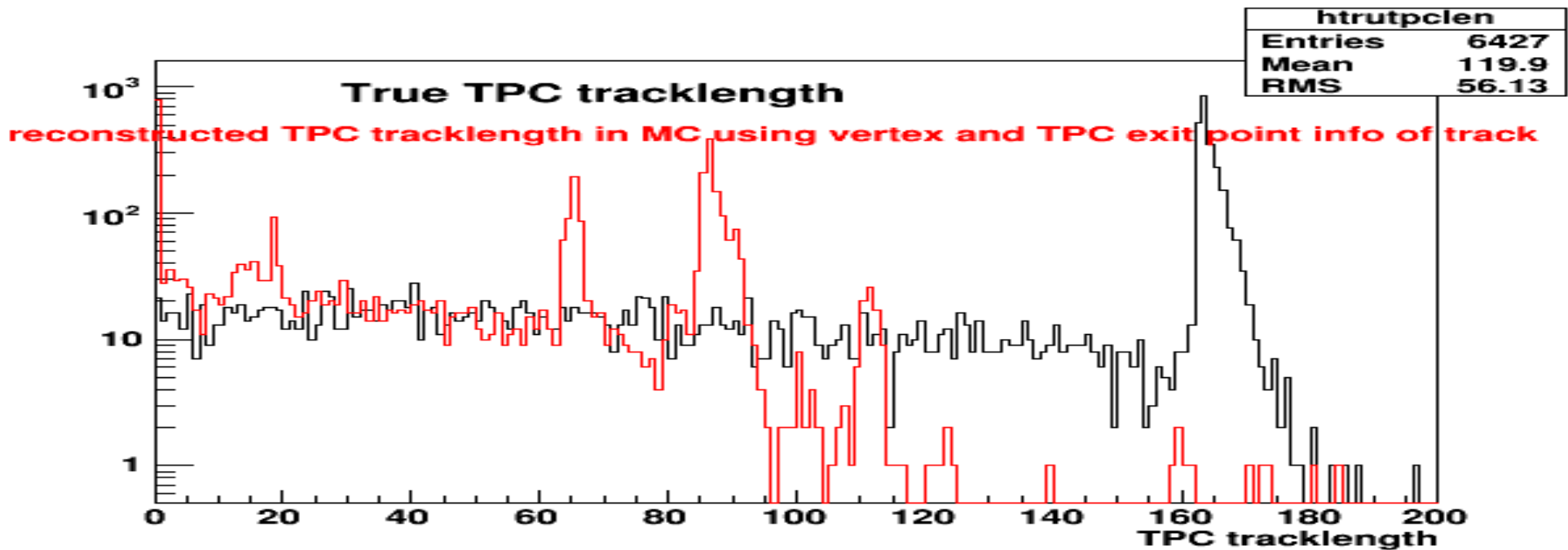
Updates on TPC tracklength in data DST

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for
MIPP Collaboration
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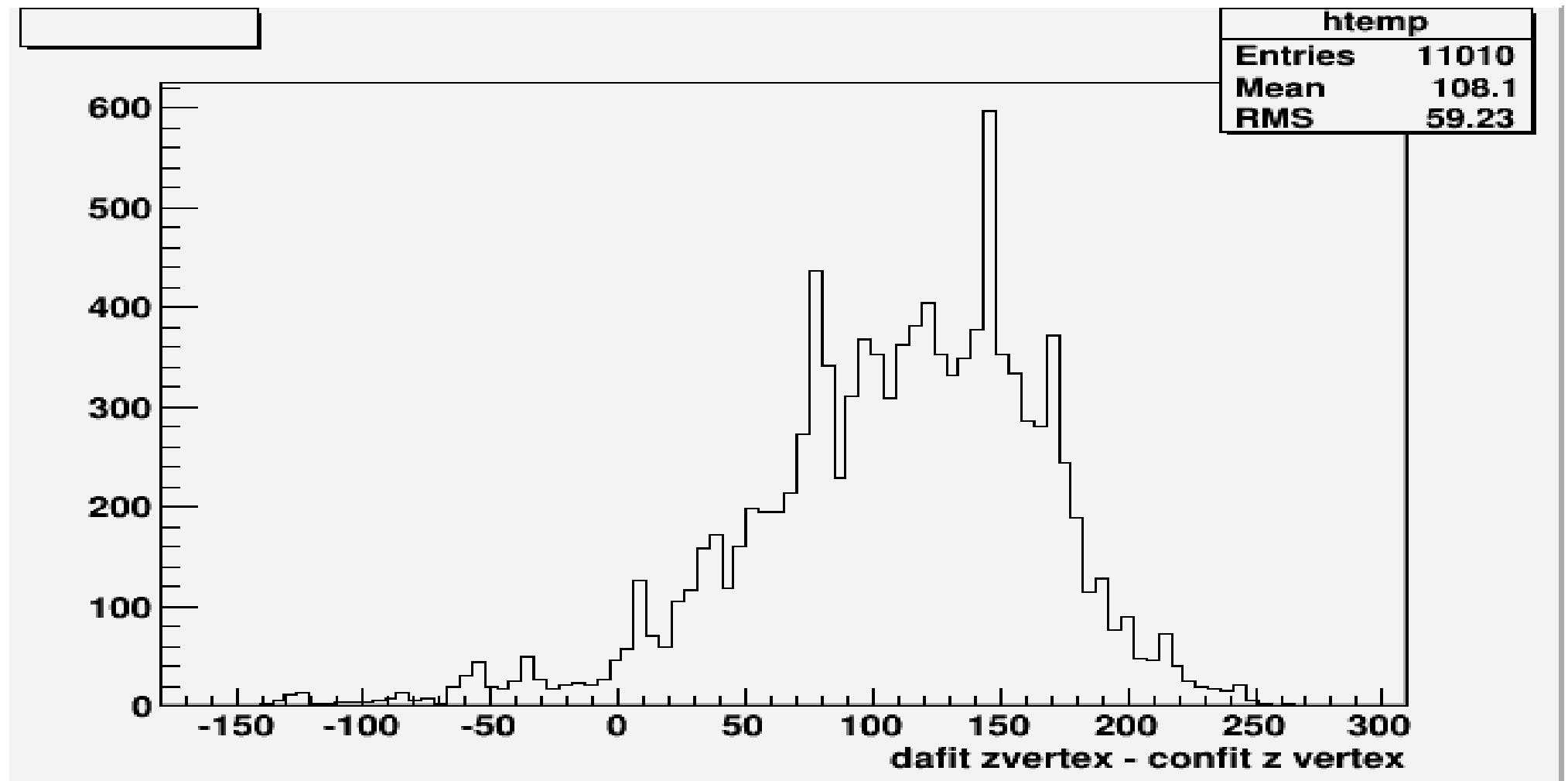
Introduction :

1. Introduction of TPC tracklength in data DST.
2. To make sure that calculation is correct the calculated TPC tracklength in MC reco should have almost the same nature as the true TPC tracklength.
3. Calculation of TPC tracklength was done using two methods
 - a) Use of z coordinate information for first hit and last hit inside TPC.
 - b) Use of track vertex and track exit point from TPC .
4. The comparison between true TPC tracklength and the reco MC TPC tracklength calculated using the above two methods will be shown today.

TPC tracklength using dafit

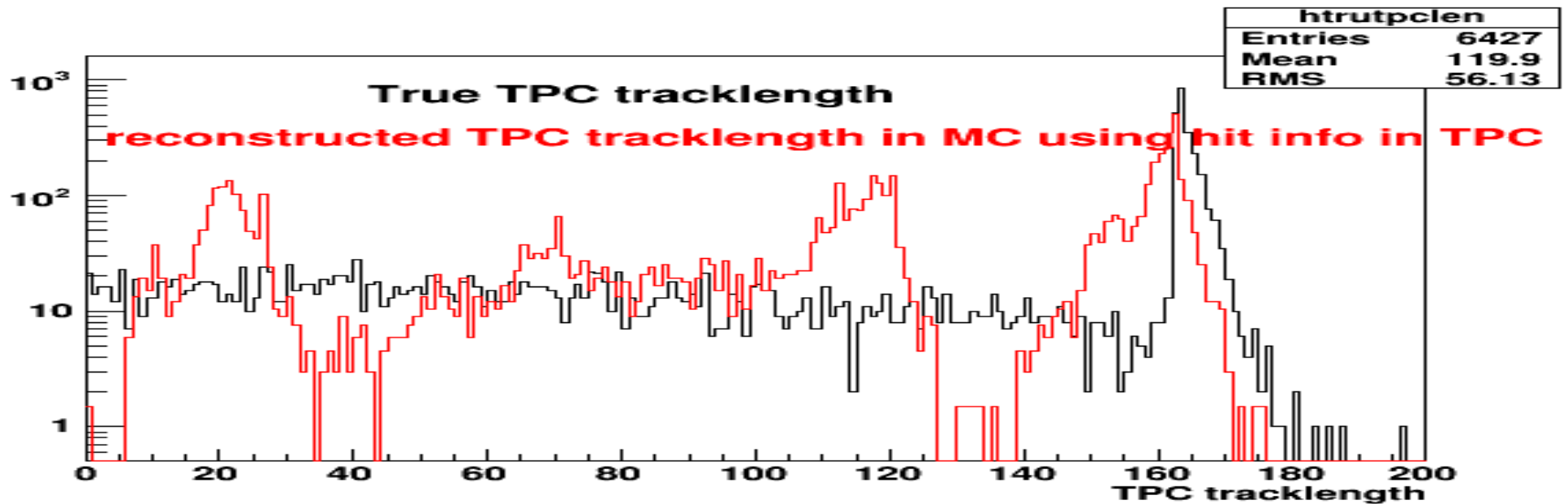
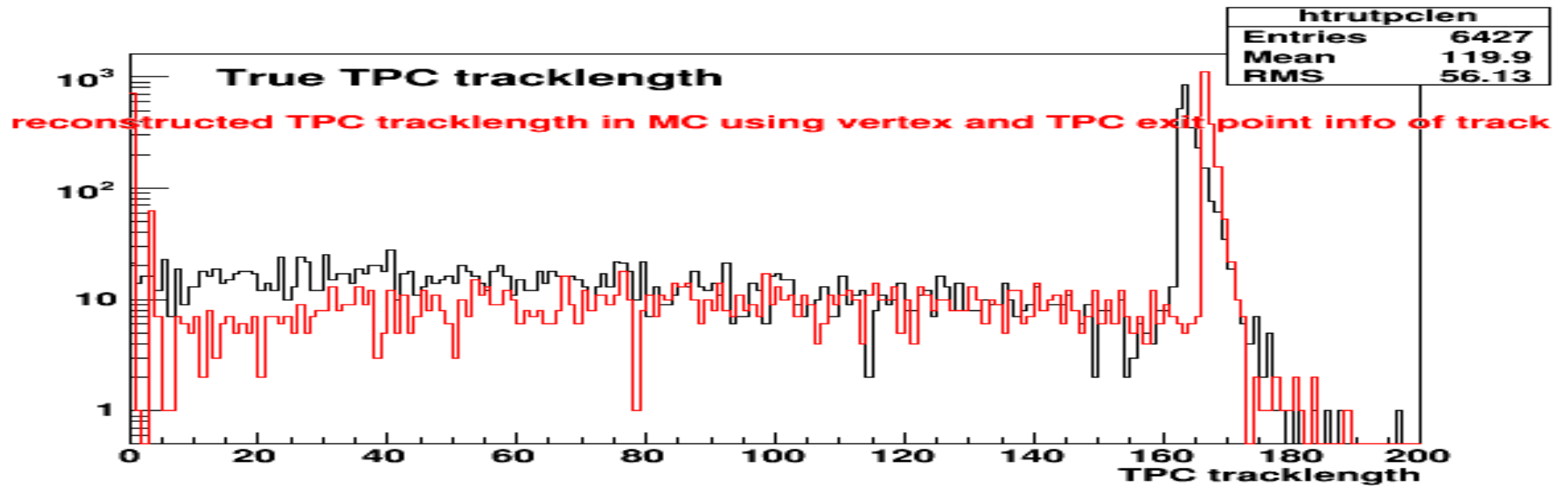


Dafit z vertex – Confit z vertex



Most of the track vertex in z for dafit lies inside the TPC

TPC tracklength using confit



Conclusions :

1. For dafit vertex none of the two procedure for calculating the reco TPC tracklength in MC matches with the true TPC tracklength.
2. For confit vertex the reco TPC tracklength in MC, calculated using the track z vertex and the z exit of track from TPC, has same nature as the True TPC tracklength.